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ABSTRACT

an analyst from the staff of the City Manager of Glendale, California, conducted a work simplification study for the central library to adjust public service operations in the library's new quarters. This report presents the study's recommendations concerning the book circulation process. Following an outline of the organization and functions of the circulation department, recommendations are made for the rearrangement of the circulation desk, film log reassignment, larger print in the visible file, reserve flagging and searching, elimination of the second overdue notice, changes from daily to weekly overdue dates, and the elimination of overdue fines. Appendixes present details on three alternative card transaction systems and circulation department process description and work flow. (SL)

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GLENDALE CENTRAL LIBRARY
Circulation Department
Work Simplification Study

Prepared
for the
Chief Librarian
Library Division
City of Glendale

by
H. C. Applegate
City Manager's Staff

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
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EPILOGUE

From June 15 to July 30, 1973 the review draft of this report was studied by key library personnel. The Chief Librarian discussed the various suggestions in the report with the senior staff members and active steps towards implementation of some of the ideas have been taken. The Circulation Desk rearrangement, the film log reassignment, the visible file larger printing, the reserve flagging, the reserve search, the elimination of the second overdue notice, the consolidation of overdue pickup, and the change from daily to weekly overdue dates have been or are planned to be put into effect (in some cases on a trial basis). Some additional suggestions which were developed during the review period are presented in an Addendum on page 24a.

The decision to adopt a weekly overdue cycle instead of the traditional daily cycle is a particularly significant decision, since it opened up the conceptual development of a much simpler and less expensive EDP-assisted book-loan transaction system. The new proposed weekly transaction system is estimated to be one-quarter as expensive as the present system, and less than half as expensive as those suggested in this report. A pilot project with EDP has been requested.

In addition the report has stimulated investigations into other areas of improvement, and effort along these lines are continuing.

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INTRODUCTION

As the new Central Library was being designed, the architects had predicted that the new building would be more efficient than the old building. In practice, however, this was not found to be the case in certain critical areas largely due to the vastly increased distances involved in the functional operations. In addition, the attendance and circulation have proved to be significantly higher than in the old building, not only in the first few weeks but at a continuing high level. In order to compensate for the greater distances and to handle the increased workload, additional personnel were requested in the 1973-74 budget. However, due to money limitations it was impossible to approve these additional personnel. Therefore, in order to maintain the necessary level of public service the only option remaining was to analyse the various work processes in the library and reduce the amount of work through elimination of less important items, simplification of operations, and the application of industrial engineering techniques wherever possible.

An analyst from the City Manager's staff was assigned to assist the library in this work simplification operation, and this report for the Chief Librarian presents the results of one portion of the investigation concerning the book circulation process.

The cooperation of all the library personnel was excellent. In particular Executive Assistant Burdette A. Peterson and Circulation Supervisor Margaret Gillette were especially helpful and made significant direct contributions to the study. The Circulation staff without exception were open-minded, cheerful and helpful. Many useful suggestions and review comments were made by those who are involved in the daily work and understand it best.

This report presents the results of the study in the form of a set of recommended suggestions for action. A brief summary of the suggested actions is presented immediately following this introduction. Then, after a section outlining the organization and function of the Circulation Department, the suggestions are discussed with background and arguments. Where extensive detail was required, as in the case of documenting work flow and in new systems design, the material is presented in appendix form at the back of the report.

Summary of Recommendations

As an overview of the results of this study the suggestions and recommendations of this report are summarized here. They are presented again in more detail in the discussion section.

1. Circulation Desk station rearrangement: Consolidate book charging and discharging on one wing of Circulation Desk and improve book flow to viz file.
2. Use only one Recordak: Experimental period indicates that load can be met with the use of only one photocharging machine.
3. Film Log reassignment: Prepare film log entry prior to mailing photocharging film for development rather than after return of developed film as presently done.
4. Viz File console redesign: Rebuild the center portion of the viz file to provide push-through book handling, improved sorting height, and improved file visibility.
5. Use of larger type printing on Viz File card tabs: Use pica or larger type on visible edge of cards used on viz file to improve card reading ability.
6. Reserve flagging at Processing Department: For reserved books which are still in the process of being purchased set up a flag on the LC holding file in the Processing Department. At present all new books are scanned by the Reserve Clerk to locate reserved new books.
7. Search Branch and Central simultaneously for reserves: Set up viz file searches for reserved books at Branches at the same time as at Central. At present the Branches are only searched after a seven week Central Search.
8. Assignment of shelving responsibility to Circulation: Assign shelving responsibility to the Circulation Department along with sufficient Pages. Perform a study of shelving process and establish sorting area and set up inspection routine.

9. Keysort Transaction Cards--alternate systems: Convert the present manual keysort transaction card system to a punched card sorting, computing and reporting system. The present system costs approximately \$16,000 per year. The recommended new system would cost approximately \$11,800 per year and would provide lists of overdue notices by date, list fines due, and list books reported lost or returned. If programming could not be made available, a less sophisticated punched card EDP system could provide a list of missing Transaction Card numbers for approximately \$10,900 per year. If higher error rates can be tolerated, a disposable transaction card and cross-off list system could be operated for approximately \$5,300 per year. If a weekly instead of a daily overdue cycle can be adapted, an EDP punched card system could operate for \$4,000 per year.

10. Elimination of second overdue notice: Eliminate the second overdue notice now prepared and mailed for each item 28 days overdue. Simply send one reminder at 14 days and a bill at 28 days.

11. Reduction of overdue pickup: Limit the items picked up at patron's home address to expensive or rare items and reduce frequency of pickup trips to once per month.

12. Reduction in the number of different loan periods: Reduce the present three loan periods (28, 14 and 7-day) to two periods. Have a staff study group determine the periods to use.

13. Change from daily to weekly overdue dates: Change to an overdue date system with due dates which are constant for a full week and fall upon the less busy day of the week.

14. Eliminate children's books' overdue fines: Follow the lead of Pasadena and retain only the charge for lost children's books.

15. Eliminate all overdue fines: Reduce money handling and book return costs by eliminating all overdue fines.

16. Use 8½ x 11 paper in one Xerox machine: To meet demand and avoid waste use 8½ x 11 paper in one of the two Xerox machines. Both presently use legal size paper. Set up signs identifying which size paper is in each machine.

17. Overall conversion to IBM - not recommended: The conversion to an on-line satellite and host computer library system as promoted by IBM is not recommended.

18. EDP Purchasing and Catalog Card processing: When the City Purchasing process converts to EDP methods (sometime after next fiscal year) consider converting the book purchasing and catalog card preparation to EDP methods.

The suggestions listed above are arranged in functional order rather than priority order. In terms of importance the most highly recommended suggestion would be the conversion from the keysort transaction cards to a punched card system with computer derived overdue lists. The next most promising suggestion would be the Circulation Desk consolidation into one wing. This arrangement is presently operating and is allowing a saving of approximately 15 hours per week which is being devoted to staff work. Following in priority order would be the viz file console redesign, elimination of the second overdue notice, the reduction to two loan periods, and the various minor but important items such as the film log reassignment, larger print on the viz file, and etc.

It is understood that some of the suggestions, such as fine practices involve policy changes and outside organizations. If these areas are to be pursued they will require additional study and documentation prior to their presentation to activities outside the library.

Circulation Department Operations

Organization and Personnel. The Circulation Department reports to the Library Executive Assistant and consists of a Clerk III Supervisor, two Clerk Typist IIs, a Clerk II, and five Clerk Typist Is. Each of the nine full time personnel in the department work a forty hour week on staggered shifts such that the department is operational sixty nine hours per week. Peak loads, illnesses, and vacations are partly covered by the use of part time Page help.

Functional Scope. The responsibilities of the Circulation Department include all aspects of control and circulation of library materials to the public from the Central Library. For study purposes the work was divided into book loan process, overdue process, and administration. The major work items in each area are as follows:

Book Loan Process: Circulation Desk Duty, Visable File operations, Public Information, Reserve Book processing, Metropolitan Cooperative Library System (MCLS) processing, Inter-Library Loan Service (ILS) processing, and Library Borrower's Cards processing. Book loan as used here includes periodicals and pictures as well as books.

Overdue Process: Sorting, filing, and searching Transaction Cards, reading Recordak film, due date stamping Transaction Cards, searching and maintaining Overdue Records, preparing and mailing Overdue Notices, searching for books on shelves, and preparation and planning for Pick Up service.

Administration: Preparation and maintenance of the Xerox equipment, processing Money from Central and Branches, closing duties, rest periods, sick leave, and miscellaneous administrative tasks.

The processes identified above are described in more procedural detail in Appendix D. The average work time required for these tasks is presented in Table 1 on the following page. These times are based upon a two-week (5/14 - 5/26) observation. Although sick leave was higher than normal during the sampling period, the relative weights are believed to be representative.

Discussion and Background of Recommendations

The suggested changes to the circulation process apply to different and often unrelated portions of the system. Therefore in order to apply some organization to the material the suggestion discussions will be grouped here into the arbitrary divisions of Book Loan Process, Overdue Process, and Administration. In most cases the suggestions can be applied independently of the others and are therefore written as though others were not being applied.

Book Loan Process Suggestions

The suggestions in this section apply to the portion of the process related to the actual circulation of library material to the borrower and its return.

Circulation Desk Station Rearrangement. The Circulation Desk arrangement of work stations as established by the architects requires a minimum of two people who are for the most part unable to help each other because of the "blind" arrangement. The architects arrangement is shown in Figure 1. The desk is an L-shaped counter configuration with the east wing (on the exit hall) designed for book charging at two photocharging stations (A,A) and the south wing (on the main hall) designed for book discharging at two slotted stations (D,D). Nearer the center of the L are a typewriter and file drawer station (B) for Borrower's Card preparation and a cash register station (C) for fine collection. Behind the south wing is located the Visible File (E) with a high sorting shelf. A structural post and high screens block the view from one wing to the other. This arrangement of stations with four or five people at the desk could handle twice the peak loads presently being experienced.

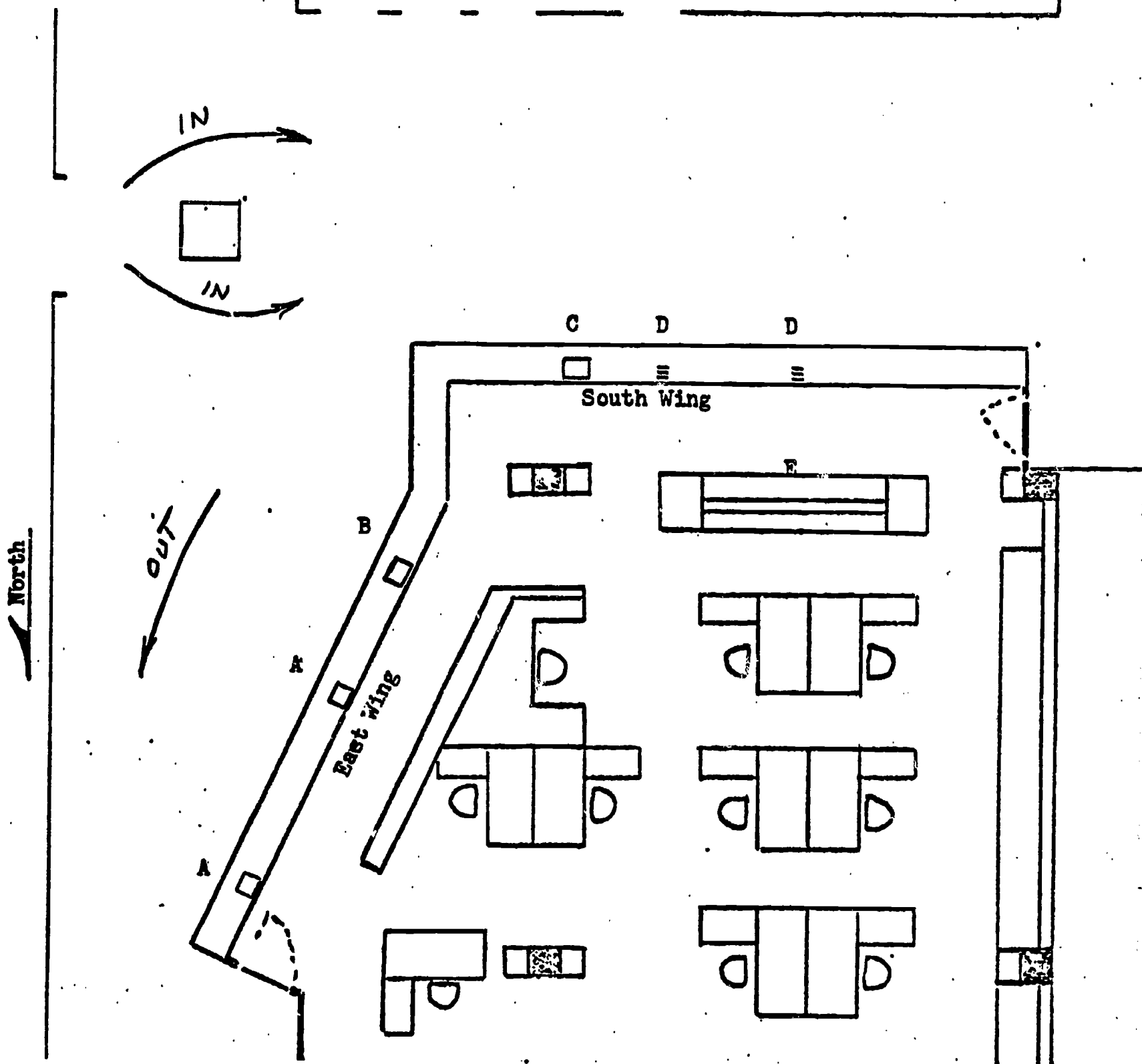
Table 1.

CIRCULATION DEPARTMENT

Average Work-Task Time Requirements

Work Item Description	Hours Per Week	Persons	% of Total
Circulation Desk Duty including Viz File	102.6	2.6	28.5
Public Information by Telephone (820 calls)	13.6	0.3	3.8
Reserve Book Processing	19.3	0.5	5.3
MCLS and ILS	12.9	0.3	3.6
Library Borrower's Cards	3.6	0.1	1.0
BOOK LOAN PROCESS TOTAL	152.0	3.8	42.2
Transaction Cards, sort, file and search	43.4	1.1	12.0
Recordak Film Reading and Typing	19.3	0.5	5.4
Due Date Stamping of Transaction Cards	7.7	0.2	2.1
Overdue Records and Files	22.6	0.6	6.3
Overdue Notices, 1st, 2nd, and 3rd	8.3	0.2	2.3
Book Search	0.5	0.0	0.1
Pick Up Preparation and Planning	12.8	0.3	3.6
OVERDUE PROCESS TOTAL	114.6	2.9	31.8
Xerox Equipment Prep. & Maintenance	3.7	0.1	1.1
Money Processing	10.6	0.3	2.9
Closing Duties	2.4	0.1	0.7
Rest Periods and Sick Leave	46.5	1.2	12.9
Miscellaneous Administration	30.2	0.6	8.4
ADMINISTRATION TOTAL	93.4	2.3	26.0
GRAND TOTAL	360.0	9.0	100.0

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- A. Photocharging Machines
- B. Typewriter
- C. Cash Register

- D. Discharge Slots
- E. Viz File Console

Figure 1. Circulation Desk Area - Original Work Station Arrangement

It is believed that this spaced-out arrangement is too expensive in manpower requirements for current needs even at peak-load periods. The minimum need for two full-time attendants and the "blind" feature of the layout which results in more calls for assistance from backup personnel because they cannot readily help each other can be improved upon by a consolidation of stations. It is suggested that both charging and discharging be consolidated at the south wing along the main hall.

The suggested arrangement of stations is shown in Figure 2. Photocharging machine A2 would be moved closer to the corner of the L, covered with a dust cover, and used for peak-load periods after 5 p.m. Photocharging machine A1 would be located near the east end of the south counter and would serve all light-load book charging flow. The cash register (C) would be moved near the center of this south wing. Discharge slots D1 would not be used and all discharge would be directed to the space between the cash register and discharge slots D2. This area for book return is directly opposite the Visible File and by locating a booktruck (F) to the right (west) of slots D2, a natural clockwise flow of books from discharge to hold to Visible File can be achieved. The children's booktruck can then be shifted from its in-the-way aisle position east of the Visible File console to the truck tunnel at the east end. The typewriter station (B) would remain on the east-west wing but be moved closer to the corner of the L so that all-station visibility is maintained. The permanent establishment of these stations at the suggested new locations will require some additional electrical wiring under the counter.

The suggested new arrangement was set up experimentally on May 17, 1973 and with some minor adjustment has proven quite satisfactory. With this arrangement it has been possible to schedule one person at desk duty during light-load periods. It had been planned along with this assignment to schedule three persons on the desk at peak periods with no overall increase; however, it proved to be unnecessary.

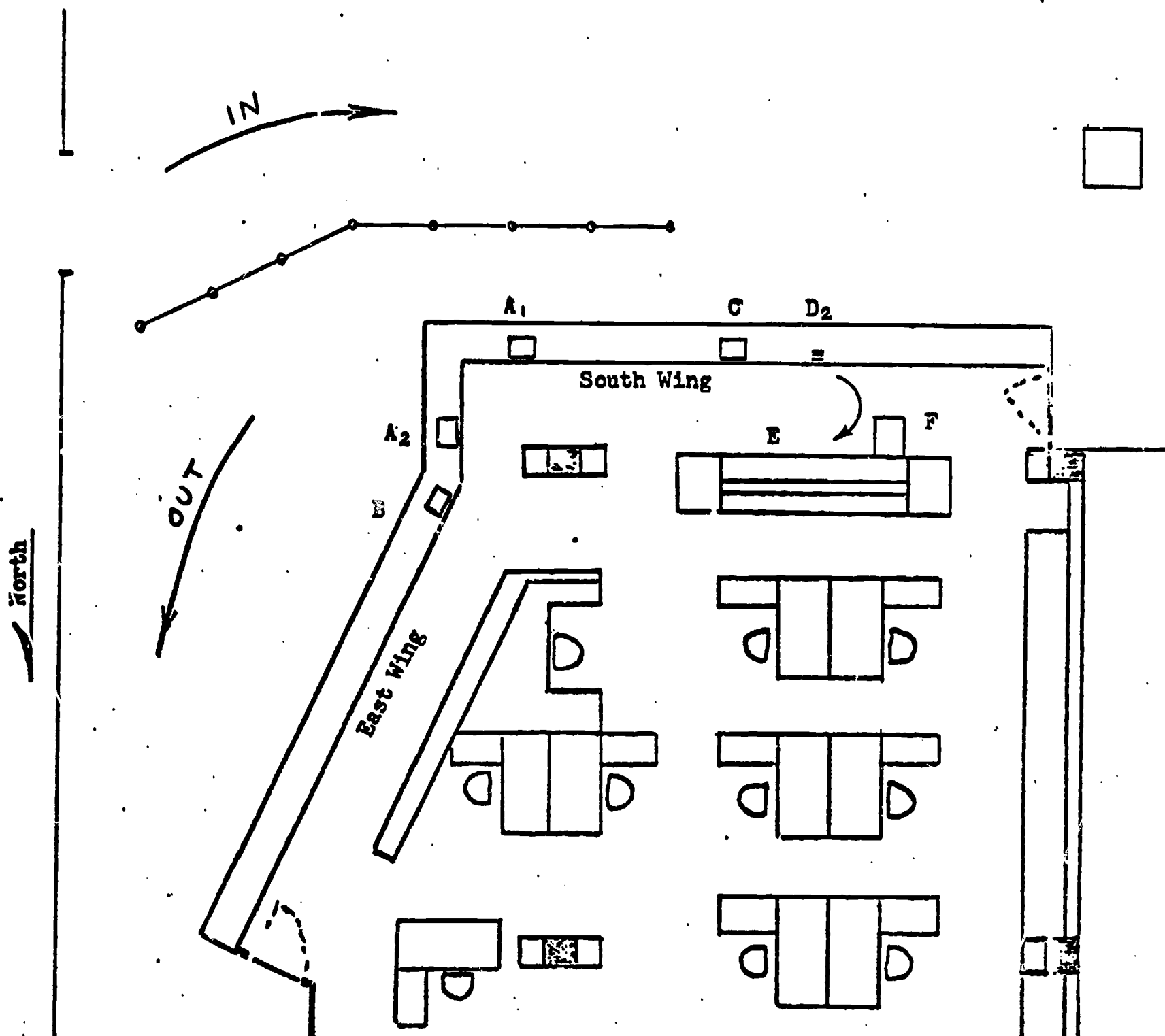


Figure 2. Circulation Area - Proposed Work Station Arrangement

The time needed for backup personnel has been reduced. The trial period was planned to be two weeks, however since it works so well it is being continued.

A predicted psychological benefit of the new arrangement has also been verified. With the old arrangement a clerk on duty at one wing of the counter with no patrons at the moment would occasionally step around the corner to help the other clerk. A patron would appear, unseen, at the now empty counter and would exhibit signs of impatience and annoyance and rap on the counter or signal any clerk visible in the back area. With the new arrangement the patrons can see the clerk, recognize that she is momentarily busy and wait. Patrons have consistently shown signs of patience knowing they will soon be helped.

With the new arrangement, however, there is believed to be an increased likelihood that patrons might walk out unnoticed without having their books charged. If this appears to be a problem it is suggested that a movable rope-and-post fence be purchased and set up to flow all exiting patrons along in front of the photocharging machine.

Use of Only One Recordak. The consolidated circulation desk arrangement described in the section above and currently being used in a trial arrangement calls for two Recordak photocharging machines to be used. Both machines are prepared with one-half the total day's estimated requirements of transaction cards. During the light-load portion of the day the machine on the consolidated (south wing) portion of the desk is used exclusively. It was planned that as traffic increased, the second machine around the corner would start to be used in a dual line as necessary. When the first machine ran out of T-cards the second machine would complete the day. Thus the use load of both machines would be about equal.

In practice however, the need to use both machines simultaneously has arisen only a few times and it has been a case of shifting from one machine to another merely to balance the use and film flow. Therefore it is suggested that only one machine be used with one set of T-Cards. The second machine would be used for failure backup with film cut as necessary. This would simplify overdue processing and film search reading.

Film Log reassignment. When the roll of film in the Recordak photocharging machine is nearly full of exposures a red light flashes indicating that a fresh load of film should be loaded. The present practice is to have the person on Circulation Desk duty or her alternate replace the film, mark the exposed film box with the last Transaction Card numbers used and place the film package immediately in the special mailing envelopes for developing. Upon the return of the developed film in the mail the Overdue Clerk makes an entry in the Film Log of the Transaction Card numbers included on the film and assigns a serial number to the roll of film. The film serial number is marked on the film box and on the log after which the film is filed in the Recordak Reader's desk to await reading. If the film is lost in the mail or during development there is no record of that film or its T-number span.

It is suggested therefore that it would be better practice to shift the responsibility for and the timing of the Film Log entry earlier in the sequence to the person changing the film in the photocharging machine. The log would be kept at the Circulation Desk near the photocharging machines. At the time the film is changed and before the exposed roll is sealed in the special mailing envelope the Film Log entry would be made and the Film Roll serial number assigned and marked on the film box. Thus the log record would be made before the film is sent out of the Library.

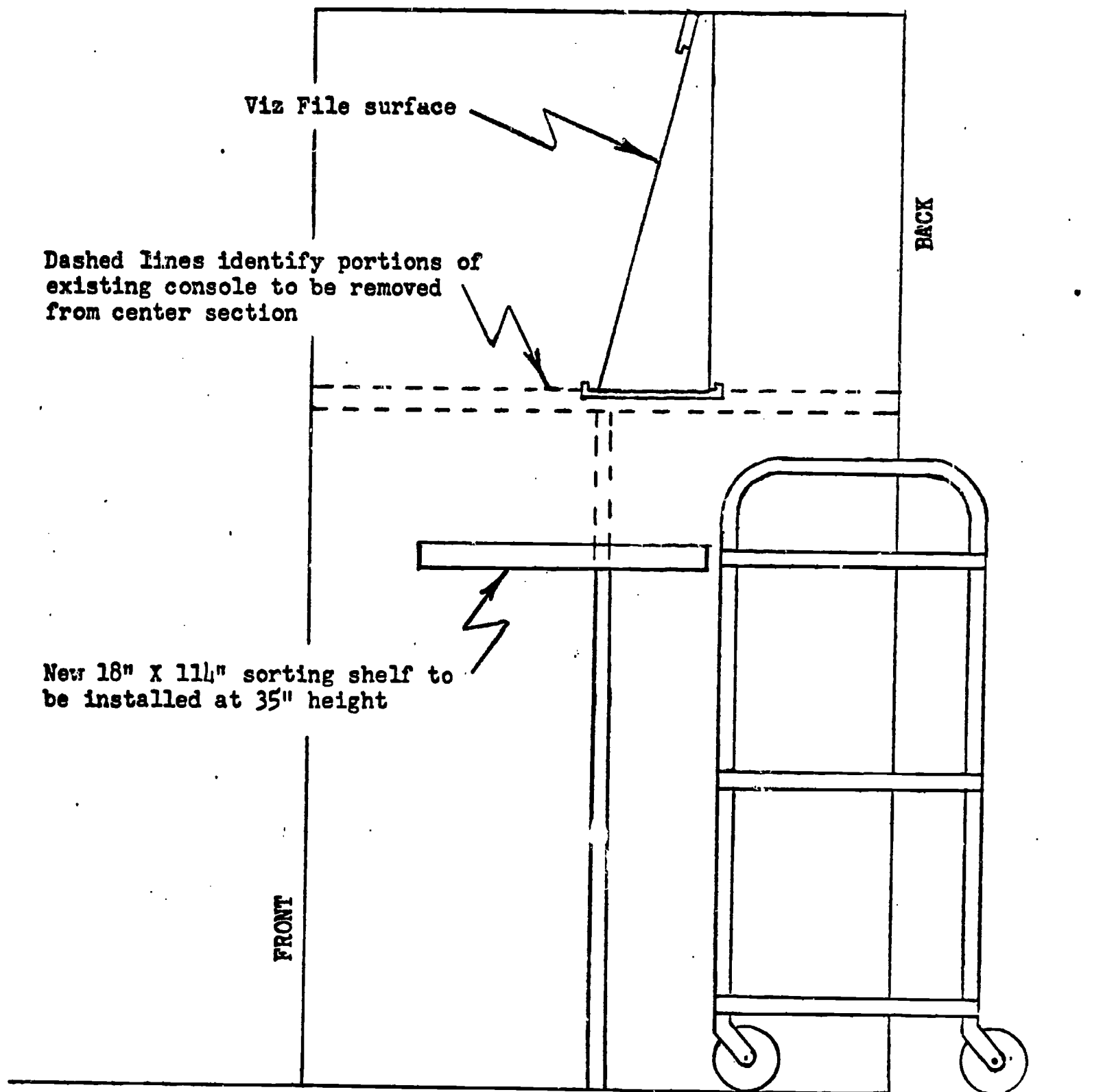
Visable File Console redesign. The Visable File console as designed by the architects is difficult for the staff to use and requires considerable handling and lifting of each book being returned. The shelf is too high for the average clerk and the need for book trucks in front of the console causes the eye-file card distance to exceed recommended human engineering standards.

It is recommended that the existing console be rebuilt to the configuration shown in Figure 3. With this concept the sorting shelf would be the same height as the book trucks top shelf. The file card board would be brought forward and lowered slightly. There would be open space between the bottom of the file card board and the top of the sorting shelf. In operation, book trucks would be parked behind the console in line along the back edge of the sorting shelf. As books completed viz file scanning they would be simply pushed through onto the tops of the book trucks. From time to time they would be straightened from the rear or placed on lower truck shelves. If aesthetics or traffic flow would permit it an ideal arrangement would be a continuous U-shaped counter top from discharge station to viz file with push-through stations for the various sorting categories such as branch, repair, periodical etc. The books then would not be lifted at all but pushed from station to station around the U-shaped counter until sorted. It does not appear that this refinement is necessary with present volumes.

• Use of larger type printing on Viz File card tabs. At present the cards placed in the Viz File have the key book identification data typed across the lower edge with a standard elite-type typewriter.

• It is suggested that improved scanning could be achieved by using larger type such as pica or IBM Selectric Courier on these cards.

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SECTION VIEW THROUGH CENTER OF VIZ CONSOLE LOOKING WEST.

Figure 3. Viz File Console -- Proposed Configuration

Reserve Flagging at Processing Department. In the reserve book process, books which are being purchased are sometimes reserved prior to their delivery. At present these books are located by the Reserve Clerk scanning all the new non-fiction books in a truck cart and by using a list of fiction books.

It is suggested that new books on reserve could be more effectively located by placing flags on the purchase cards in the Library of Congress hold file in the Processing Department. This would serve the added function of indicating priorities on new book processing. Where multiple flags, six for example, appeared, it could indicate that a catalog card should be prepared immediately rather than waiting for the LC card. At present this last function is performed by the Reserve Clerk searching the hold shelves in Processing for the book and placing the book with a red bookmark on the desk of the LC Clerk. With the flag system, all new books on reserve could be delivered to the Reserve Clerk in Circulation.

Although not actually a Circulation function, there is a related operation that might benefit from a modified procedure. At present new books for Central after completing processing are trucked to Circulation. There they are scanned for reserves (as discussed above), they are reviewed by the non-fiction librarians, and are placed on a shelf in Circulation for the purpose of quick review by all the librarians so as to be familiar with new acquisitions. It is suggested that this supervisory and staff review might be more effectively performed by placing the truck of new books in the librarians' workroom entrance for one day prior to being shelved or circulated. It is felt that at this location the staff review would be more apt to take place.

Search Branch and Central Simultaneously for Reserves. At present in the reserve process the search in the branches for a book reserved at Central takes place only after the Central Library visible file has been searched for six weeks.

This amounts to a delay of up to 14 weeks prior to starting an MCLS search for a book in the Glendale collection. It is felt this waiting period for the patron could be shortened by adding a slight amount of branch searching.

It is suggested that the branches be searched simultaneously with the Central collection. This would require a check of the Processing Department's shelf cards and the forwarding to the branches of viz cards for those books in their collection at the same time as a viz card was posted in the Central Circulation board.

Assignment of Shelving Responsibility to Circulation. Under the present organization, the responsibility for reshelving returned books is not in the Circulation Department. The shelving activity appears to be at this time under-supervised and much of the details of the shelving work are being determined on the initiative of the pages themselves. In consideration of this situation and developing a logical full book-loan cycle from shelf to patron to shelf, it is recommended that shelving responsibility be assigned to the Circulation Department. This would provide control over the clearing of the viz file area and would be a natural coordinated activity for the shelf searches in connection with the reserve system. At present these shelf searches are being neglected due to the pressure of other work.

It is suggested that a number of pages be assigned to Circulation for this function and that one of the clerk typists be assigned as coordinator and shelf inspector. Time to perform this function will only be available if enough of the suggestions in this report are implemented to free the necessary man hours.

The shelving process is now a somewhat haphazard affair, and it is further suggested that a study be made of the process flow, the formalization of a staging or sorting area, and some definition of techniques.

Overdue Process Suggestions

This section of the report presents discussion on suggested changes to the overdue process functions of the Circulation Department. It is in this area that the greatest savings appear to be possible.

Keysort Transaction Cards--Alternate Systems. The present transaction card used in the charging process is a re-usable McBee type keysort card. All returned cards are manually sorted by needle and re-filed. Missing numbers are manually determined by visual inspection and are manually recorded to produce the overdue list. A considerable amount of labor is spent in this process (12% of total department labor) and even though the cards are reused, the annual material costs are still relatively high. The accuracy rate achieved is remarkably high considering the number of manual steps and can only be attributed to careful work by the staff. There are several transaction card systems which can provide more economical determination of overdue material.

Before discussing other concepts, a brief summary of the costs of the present system would be in order.

Central Circulation labor sorting and searching keysort cards is approximately 40 hours per week.

Assume a labor cost of \$3.30 per hour.

Labor = $(40.) (3.30) (52) = \$6,864$ per year.

Average transaction cards purchased since 1970 = \$2,373 per year.

Assume 50% chargeable to Central Circulation or \$1,187 per year.

Labor plus material = $\$6,864 + \$1,187 = \$8,051$ per year.

For Central plus branches this would be \$16,100 per year.

The transaction card system recommended for Glendale is a punched disposable card system in which EDP would calculate and report daily upon overdue T-numbers scheduled for First Notice, Second Notice, Final Notice, and Pickup, and upon Books Returned--Fines Due, Books Claimed Returned--Fines Due, and Books Claimed Lost--

Fines Due. The EDP process would calculate overdue-notice due dates, calculate fines, and clear records. The Circulation staff would merely forward to EDP each day the returned cards with paid-at-desk fine cards segregated and with a brief report of T-number daily spans and claims data. This system is described in more detail in Appendix A. The estimated costs for this system are:

EDP re-charges (budget to budget)	\$ 4,160
Material costs for 500,000 cards	<u>1,725</u>
CENTRAL TOTAL	\$ 5,885 per year
For Central plus branches total would be	\$11,770 per year

With this system approximately 45 hours of labor in the Circulation Department would be made available for other duties each week.

This sort, calculate and report system would however require developing a new computer program. The EDP staff has reviewed the system description document (Appendix A) and has indicated it to be quite feasible as far as production workload and daily operations workload are concerned; however, the analysis staff to prepare the computer program might not be available for as much as a year.

In the event that programming priorities cannot be revised or an existing program adapted, a simpler punched card system is suggested which would consist of a simple sort and list of missing T-card numbers by EDP. This would give essentially the same data as the present keysort method. This system is described in more detail in Appendix B. The estimated costs for this minimal system are:

EDP re-charges	\$ 3,744
Material costs for 500,000 cards	<u>1,725</u>
CENTRAL TOTAL	\$ 5,469 per year
Central plus branches total would be	\$10,938 per year

With this system approximately 30 hours of labor in the Circulation Department would be available for other duties each week.

If the daily overdue cycle could be changed to a weekly cycle, a much simpler and even less expensive system could be used.

A third alternative transaction card system, which is the most economical of all, is widely used by smaller libraries. This is a disposable transaction card system in which the returned T-cards are manually crossed off of a master list. At the end of the loan period the numbers not crossed off comprise the overdue list. This system, while economical, is subject to many errors of the type leading to bad public relations. The system is described in more detail in Appendix C.

The estimated costs for this cross-off system are:

Assume 2,000 cards per day

Assume 0.04 minutes per cross off (Fry Study, 1961)

Assume 312 days per year

Assume \$3.30 per hour labor costs

$(2000)(.04)(312)(3.30)/(60) = \$1,372.80$ per year, labor.

Cross-off sheets, \$8.50 per 100 X 5 = \$ 40.50

Transaction slips \$2.50 per 1M X 500 = $\frac{1,250.00}{\$1,290.50}$ per year, material

Total Central	\$2,664 per year
Central plus branches total	\$5,328 per year

With this system approximately 25 hours of labor in the Circulation Department would be available for other duties, e.g. writing letters of apology for erroneous overdue notices.

In summary, the EDP system which would perform the more routine and tedious functions automatically and accurately is recommended. If this system cannot be achieved, then the alternatives would provide cost savings, or at least the desired savings in labor time could be adapted.

Elimination of Second Overdue Notice. The present overdue system uses four overdue notices. A first or reminder notice after a book is 14 days overdue, a second notice when the book is 28 days overdue, a third notice with a bill for the cost of the book when the book is 42 days overdue, and an in-person pickup at 56 days. The returns from the second notice are very small compared to the first

notice and billing notice. In '72-'73 there were 7,374 postals, 2,320 reminders, 2,301 bills and 852 pickup runs. It is suggested therefore that the second notice be eliminated and the billing notice moved up to 28-days' overdue.

Reduction of Overdue Pickup. The fourth overdue notice at present is in the form of a pickup at the patron's home address of material still overdue after 56 days. The cost of this pickup is quite high. An average of nearly 13 hours is spent each week by a clerk preparing the pickup cards and planning the pickup route. The weekly pickup trip itself usually takes a full day plus the vehicle costs. During the observation period, fines and books averaging \$72 per week were collected. This is believed to be higher than usual because no pickups prior to this had been made for some time due to the move to the new facility. It is suggested that the pickup process be restricted to expensive or rare materials on a less frequent basis, perhaps once a month.

Reduction in the Number of Different Loan Periods. The present loan system uses three different loan periods: 7 day, 14 day, and 28 day. Each loan period requires a separate serial number series of transaction cards and separate overdue lists and records throughout the overdue process. In general the 7-day period is used for new fiction and the 14-day period for new non-fiction. Over 80% of the transactions are 28-day periods. According to the literature, a large number of libraries use a single loan period of two weeks. Others use two loan periods of two weeks and one week. (See Fry Report, p. 39.) It is suggested that Glendale reduce from three to two loan periods. In general discussions with the staff, there was no agreement on the proper periods to select. Therefore, it is further suggested that a study group from the staff be assigned to determine and agree upon the lengths of loan periods to use.

Change from Daily to Weekly Overdue Dates. At the present time the borrowed-books' due dates are a specific number of days from the charge date, that is each

day a new set of due dates are calculated and transaction cards stamped. Similarly, overdues are processed on a daily basis as their periods come due. Since loan periods are all in even weeks, books charged on the busiest days of the week fall due also on the busy days. This tends to amplify the busy-nonbusy variation pattern that exists during a week.

It is suggested, therefore, that Glendale change from a daily overdue calculation to a weekly cycle. All material charged out during a week would have the same due date for any given loan period. The due date could be set, for example, to fall on Fridays and might help level out the busy-nonbusy cycle. It would simplify the transaction card stamping operation and eliminate much of the re-stamping presently being done. It would also change the overdue processing cycle from a daily basis to a weekly basis, so the week's overload could be adjusted to balance the circulation desk duties. At present the most overdue notices are due on the busiest days, and this presents a psychological problem of "apparently" not being able to keep up with the work even though on a weekly basis it all comes out even. This change could be coordinated with the changes in loan periods to perhaps achieve shorter average loan periods and reduce the budget pressure for extra copies of popular material.

Eliminate Children's Books' Overdue Fines. At present fines are collected by Glendale for overdue children's books. The City of Pasadena eliminated children's fines several years ago. A telephone inquiry indicates that although the number of lost books is slightly higher now, Pasadena is quite satisfied with the results. They will provide more detailed material upon request, if desired.

It is suggested that Glendale eliminate charging fines for children's books which are overdue. Charges would still be made for lost books.

If desired a more detailed study could be made covering this area and the many arguments pro and con.

Eliminate All Overdue Fines. This is an extension of the suggestion above.

In the light of the goal of this study to reduce work tasks within the Circulation Department, it should be noted that considerable time would be saved in money processing and book discharging if fines were eliminated.

Therefore, it is suggested that all fines for overdue books be eliminated. Charges would still be made for lost books. This might be done in concert with Pasadena and Burbank for maximum effectiveness. The Meyer Report for the Alameda County Library System lends considerable support to the no-fine concept. If desired a more detailed study and argument for Glendale could be developed.

Administration Area Suggestions

The operations in the administration area appeared to be in good order and only one suggestion is made.

Use 8½" x 11" Paper in One Xerox Machine. At present both of the public-use Xerox machines are provided with legal-size paper. Many patrons and also staff reproduce 8½" x 11" material and are therefore required to cut off and waste the excess paper resulting from the use of legal-size stock.

It is suggested that one of the two Xerox machines be regularly set up and supplied with 8½" x 11" paper. The other machine would continue to be supplied with legal-size paper as at present. The machines should be clearly marked with large signs indicating which size paper is in each. In addition the index markers should be modified or masked to make clear the proper position to place the material to be copied. Patrons regularly have difficulty with the present index markers.

Overall System Conversion to IBM -- Not Recommended

Since the automation of library processes by EDP is part of the Long-Range Plan, the concept was briefly reviewed to determine the impact upon suggested short-range uses of EDP services for the Circulation Department.

A meeting was held with Mr. Charles W. Brill and Mr. Nick J. Nucci, IBM

Marketing Representatives for the IBM Library Circulation Control System.

The system promoted by IBM would use a System/7-2790 satellite in the library with on-line transactor stations at each branch and Central. The System/7 would telephone-line tie into the City's System 370 for batch processing. The present photocharging machines would be replaced by No. 2791 Area Stations with read-and-display capability.

The system would contain the entire library collection in the host computer files and would contain currently charged books, delinquent patrons, reserves and current use statistics in the local System/7 files. New acquisitions would be added to the system via EDP purchasing and catalog card generation programs. During charge-out the book card and borrower's card would be read by the 2791 and the display would show automatically any delinquent or reserve status. Requesting a reserve would be made on the same equipment and would instantly display the number of reserves already waiting for that book. Upon query the system would display the status, e.g. who borrowed and when due, of any item charged out. Overdue notices and bills would be automatically generated. Statistical data would be generated in a variety beyond any conceivable use.

The system would be extremely expensive and would not improve service to the public. The cost to convert all book cards and patrons' cards would be in itself prohibitive unless done over many years. Although it would provide features not presently available, such as detecting delinquents at charge-out, none of the features are at all essential. It could replace at most perhaps half of the Circulation staff and perhaps one-third of the Processing Department staff, but it is believed that the net cost would still be greater than the present system. This writer does not recommend the full conversion to the full on-line system now or even in the next ten years. The adaption of such a system would be for political rather than practical reasons. It is understood that the City's EDP

staff also does not recommend the full system at this time.

EDP Purchasing and Catalog Card Processing. There are features of the system, however, which could be adapted in the future and would improve the current processing. The purchasing and catalog-card preparation processes lend themselves to EDP adaption and could reduce both time and labor. These processes would not require the expensive on-line equipment and could be easily handled by the existing City EDP system. Since the purchasing process is closely tied in to the general City purchasing it is recommended that automation be delayed until after the City's purchasing function is incorporated in the EDP system. This is expected to be some time after the next fiscal year.

This concludes the discussion of suggestions and recommendations made in this report.

ADDENDUM

Additional Suggestions Developed During Review Period

During the review of this report from June 15 to July 30, 1973, some additional suggestions were developed for improvements in the circulation process and are presented in this addendum to the report.

The Use of Multipart Forms for Overdue Notices. At the present time the first overdue postal and two P-slips are typed from the Recordak film and subsequent overdue notices are individually typed as needed. There are available multipart forms which might meet all the notice needs with a single typing.

It is suggested that a brief study be made of the available forms and the various copy needs for files and notices. If necessary a special form could be developed at very low cost. Something on the order of a five-part form with a copy for first reminder postal, bill notice, pickup, numerical file, and patron file might serve well. The package could remain in the numerical file and be torn off and used as necessary.

The Use of Sliding Shelves Under the Circulation Desk. At book discharge certain categories such as branch books, mends etc. are immediately sorted to fixed shelves under the Circulation Desk. These shelves are cleared several times a day and being low and deep are awkward to empty.

It is suggested that the three or four shelves with the heaviest use be outfitted with sliding shelves on wheel-bearing tracks so that the books could be easily pulled out to a reachable position for unloading. These sliding tracks are not expensive and their use might prevent possible back injury.

CIRCULATION STUDY

APPENDIX A

CANDIDATE PUNCHED CARD TRANSACTION SYSTEM

Background

At book check out (Charge) the book data check card, the borrower's Library Card, and a serial number Transaction Card with the due date are photographed. The Transaction Card (T-card) goes out with the book and upon the book return (Discharge) the T-card is removed and processed for the overdue data. At the end of the loan period missing T-card numbers identify overdue books.

There are eight photography machines and each machine requires a separate Transaction Card number series for the three loan periods, 28 day, 14 day, and 7 day. Thus there are 24 separate Transaction Card series. At the beginning of each day an expected use quantity of each T-card series is hand stamped with the due date and placed at the photography machines. The first and last T-card serial number used each day defines the Charge Block for that Charge Date for each series. Unused T-cards are re-dated so that serial continuity is maintained.

The present system uses Key-sort cards and manual processing. It is suggested that punched cards and computer processing could accomplish this phase. A possible system could be as follows:

Transaction Card Preparation

The Transaction Cards would be prepared in advance by pre-punching and pre-numbering tab cards in batches. The transaction number is a six digit serial number preceded by a code for photography machine and loan period, e.g. A-28-999,999. Slightly less than 4,000 transactions per day are made with an annual volume of 1,000,000 transactions.

Transaction Card Processing - Daily at EDP

The following six-days-a-week daily cycle is visualized. Details are presented in order to explain the concept and are not intended as the final design which would be developed by the EDP staff.

1. Receive Charge Block beginning and end of day serial numbers and Charge Date.
 - a. Keypunch into input cards.
 - b. Input and assign memory locations for Charge Blocks.
2. Receive Special Transaction data. The Library would provide a daily input, by transaction number, of the data:
 - a. Keypunch and enter the following data:
 - Fines Paid (T-number and date, no fine amount)
 - Books returned without T-card. (T-number and discharge date)
 - Books claimed lost. (T-number and date)
 - Books claimed returned. (T-number and date)
 - b. Store Fines Paid and Books Returned T-numbers with other returned T-numbers in Charge Blocks with flags signifying Fines Paid or Book returned without T-card. Check for duplicate T-number and discard non-flag number if duplicate. Carry discharge dates.
 - c. Store Books Claimed Lost and Books Claimed Returned T-numbers in special continuing Claims File. Add from manual input and delete from Clearout and returned T-numbers (See paragraph 7). Claim date and Fine Due is part of this file (See paragraph 6).

3. Receive returned T-cards for prior day with Discharge Date.
 - a. Key punch Discharge Date in input card.
 - b. Input returned T-cards in random order (read in)
 - c. Sort T-card numbers in numerical order and store by Charge Blocks (max. 9,999 T-numbers per block) with Discharge Date with each T-number.
4. Calculate Overdue Dates for each Charge Block received this day as follows and store with Charge Blocks:
 - a. Overdue, First Notice Date
 - 28 day Charge Blocks: Charge Date plus 42 days.
 - 14 day Charge Blocks: Charge Date plus 28 days.
 - 7 day Charge Blocks: Charge Date plus 21 days.
 - b. Overdue, Second Notice Date
 - 28 day Charge Blocks: Charge Date plus 56 days.
 - 14 day Charge Blocks: Charge Date plus 42 days.
 - 7 day Charge Blocks: Charge Date plus 35 days.
 - c. Overdue, Final Notice Date
 - 28 day Charge Blocks: Charge Date plus 70 days.
 - 14 day Charge Blocks: Charge Date plus 56 days.
 - 7 day Charge Blocks: Charge Date plus 49 days.
 - d. Overdue, Pickup date
 - 28 day Charge Blocks: Charge Date plus 84 days.
 - 14 day Charge Blocks: Charge Date plus 70 days.
 - 7 day Charge Blocks: Charge Date plus 63 days.

- e. **Clear Out Date.** At this date all data for the designated Charge Block is cleared and the memory space made available for assignment to new Charge Blocks. The Fines Due and Claims Files are also purged of T-numbers belonging to these Charge Blocks. T-numbers still missing are listed one last time on the Overdue Report under Clear Out and the purged data from the Fine Due and Claims Files are printed one last time in the Backlog Status Report with "Clear Out" in the Remarks column.

All Charge Block: Charge Date plus 98 days

5. Calculate fines due on returned books.

- a. Using the Discharge Dates and Charge Dates for each T-number returned calculate Fine Due at rate of \$0.05 per working day.
$$\text{Fine} = 0.05 (\text{Discharge Date} - (\text{Charge Date} + 28, 14, \text{ or } 7 \text{ days less non work days}))$$

Note: Zero or negative number equal zero fine.

- b. Compare Fines Paid flags (see paragraph 2b) with calculated Fine Due and discard matching T-numbers from Fine Due list after print out in Backbg Status Report of Remark "Fine Paid" (See paragraph 8)
- c. Set up continuing file for Fine Due list. Discard T-numbers for all zero fines entries. Add from new fine calculations and delete from Fines Paid and Clear Out data. Carry Discharge Dates as part of file. Print from this file for Backlog Status Report (See paragraph 8)

6. Calculate fines due on books claimed returned or lost.

- a. Using dates from Claims Files and Charge Dates for each T-number added to the Claims File calculate the Fine Due as in paragraph 5. Carry the Fine Due in the Claims File (See paragraph 2c).

7. Scan returned T-numbers in all Charge Blocks for T-numbers listed in Claims File. If present in returned T-numbers delete from Claims File after print out of Remarks note stating "Book Returned - Dishcharge Date _____" in appropriate Claims section of daily Backlog status report (See paragraph 8).

8. Print Backlog Status Report. This daily report will be a continuing report with items carried and repeated until deleted. The report would contain the current date and contain four columns headed "Transaction Number", "Action Date", "Fine Due", and "Remarks". The report would be in three sections as follows:

- a. Books Returned - Fines Due
- b. Books Claimed Returned - Fines Due
- c. Books Claimed Lost - Fines Due

9. Print Overdue Report.

- a. Compare calculated Overdue Dates (paragraph 4) with the current calendar date. Select Charge Blocks with due dates corresponding to the current date and scan for missing T-numbers. Generate missing T-numbers for unreturned books.
- b. Print Overdue Report with a column for each type of overdue notice under the general heading "Transaction Numbers - Unreturned Books". Include the current date on the report. Column headings are:

Overdue First Notice

Overdue Second Notice

Overdue Final Notice

Overdue Pickup

Clear Out

10. Separate reports are to be prepared for each photography machine's T-number series. Each report will consist of the Backlog Status Report followed by the Overdue Report. Start the Overdue Report on a new page.

CIRCULATION STUDY

APPENDIX B

ALTERNATE PUNCHED CARD TRANSACTION SYSTEM

Alternate System Overview

This alternate system to the one described in Appendix A would be designed to require the minimum EDP staff system development and programming time and still provide useful and labor-saving results.

With this minimum system pre-numbered and pre-punched Transaction Cards would be collected daily and forwarded to EDP along with overdue notice dates. EDP would input and sort the Transaction Numbers received and merge into a continuing record of each Transaction Number series. Missing numbers would be determined for T-numbers with overdue notice dates corresponding to the current date and an output report would be prepared listing missing T-numbers and their associated overdue notice types, i.e. first, second, third, or fourth. From this list the Library Circulation Department would set up the manual files and prepare overdue notices much as at present.

Background

At book check-out (Charge) the book data check card, the borrower's Library Card, and a serial number Transaction Card with the due date are photographed. The Transaction Card (T-card) goes out with the book and upon the book's return (Discharge) the T-card is removed and processed for the overdue data. At the end of the loan period, missing T-card numbers identify overdue books.

There are eight photocharging machines and each machine requires a separate Transaction Card number series for the three loan periods, 28 day, 14 day, and 7 day. Thus, there are 24 separate Transaction Card series. At the beginning of each day an expected use quantity of each T-card series is hand stamped with

the due date and placed at the photocharging machines. The first and last T-card serial number used each day defines the Charge Block for that charge date for each series. Unused T-cards are re-dated so that serial continuity is maintained.

The present system uses Keysort cards and manual processing. It is suggested that punched cards and computer processing could accomplish this phase. A possible system could be as follows:

Transaction Card Preparation. The Transaction cards would be prepared in advance by pre-punching and pre-numbering tab cards in batches. The transaction number is a six-digit serial number preceded by a code for photocharging machine and loan period, e.g. A-28-999,999. Slightly less than 4,000 transactions per day are made with an annual volume of one million transactions.

Transaction Card Processing--Daily. The following daily schedule is visualized. The Library portion would be six days per week and the EDP portion five days per week. Details are presented for conceptual understanding and are not specified final design.

1. Upon book return all Circulation Desks would remove and slot T-cards, segregating those eight or more days' overdue. The T-numbers on the segregated overdue cards would be manually listed in random order by the Overdue Clerk prior to T-card pickup.
2. All branches would forward returned T-cards to Central each day by normal inter-library mail.
3. Central would collect T-cards brought in from the branches and from Central Circulation and would deliver these T-cards to EDP before 5 p.m. There would be no specific cutoff time for picking up T-cards from Circulation Desks--it would depend upon mail schedules.

4. Each Circulation Desk would prepare a daily report to EDP with the following information:
 - a. Prior day's Charge Block beginning and end-of-day serial numbers for each T-number series; the largest Charge Blocks will span on the order of 1000 T-numbers.
 - b. For each Charge Block a list of four manually calculated calendar dates for the first, second, third and fourth overdue notices respectively. These dates would be limited to Monday through Friday workdays.
 - c. A list of T-numbers which any Circulation Desk wishes to have indicated as "returned" to the system. It is estimated that there will be less than 50 such numbers per month.
 - d. The beginning and ending serial T-numbers of any Charge Blocks which are to be purged from the system prior to the re-use of that number series. The maximum number of purges will be on the order of $24 \times 4 = 96$ per year.
5. EDP would keypunch the manual and control data and input to the System 370 along with the returned T-cards in random order.
6. EDP would maintain a magnetic tape file of all returned T-numbers by Charge Block. The arrival of a Charge Block in the daily input will initiate a block of records. The block of records will consist of the Charge Block span numbers; the four associated calendar dates coded for First, second, third, or fourth overdue notice; followed by the individual returned T-numbers. As T-numbers are returned, the file will grow until purged. The blocks of records will be in T-number order of Charge Blocks on the tape.
7. EDP would sort the returned T-numbers input each day and update the master returned T-number file by merging the added numbers into their

respective Charge Blocks.

8. EDP would, during the update process as each Charge Block was read in from the master file, compare each of the four overdue notice dates with the current date. If any one of the four dates matched the current date, that Charge Block would also be processed for an output report. If none of the dates matched the current date, that Charge Block data would not appear in the output report that day.
9. EDP would, for the Charge Blocks destined to be in the output report that day, after merging generate a list of T-numbers missing from that Charge Block and identify them with the code designating first, second, third, or fourth overdue notice as determined by which date matched the current date.

From this data a report would be printed for use in the overdue-notice processing. The report would be organized as follows:

1. The report would be in two columns headed "Transaction Numbers" and "Overdue Notice Type." Under the Overdue Notice Type print the terms "1--Postals," "2--Reminders," "3--Bills," or "4--Pickup" as determined by the overdue-notice code. Under Transaction Numbers list the T-numbers.
2. The data would be in T-number order throughout.
3. A new page would be started every time the first digit changes (the photocharging machine alpha code). The largest report per photocharging machine would be on the order of 200 entries on weekdays and 400 entries after a weekend.
4. Several lines should be skipped every time the second and third digits change (loan period).
5. The report should be dated with the current date and titled "Glendale Public Library, Overdue Notice Schedule." The total report would average 800 entries.

Overdue List Processing. The Overdue Notice Schedule EDP report would be mailed to the Central Library Circulation Department and the appropriate photocharging machine sections would be burst and delivered to branches.

Procedure would then be as follows:

1. Each Overdue Clerk would check her manual list of eight or more days' overdue T-cards which had come in the last several days against the EDP report and cross off the appropriate numbers. This step could be omitted without serious damage.
2. Each Overdue Clerk would process the "1--Postals" entries in the report through the Recordak film reader and generate the first notice postal cards and two duplicate slips (P-slips) with the T-number, patron data, and book data.
3. The duplicate slips (P-slips) would be maintained in two small manual files. One file would be in T-number order and the other would be in order of the patron's last name. These files would be set up and used in much the same fashion as at present, except the T-number file would not have the postals, reminders, bills and pickup sections.

The remainder of the overdue process would be as at present.

CIRCULATION STUDY

APPENDIX C

CANDIDATE DISPOSABLE SLIP AND CROSS-OFF TRANSACTION SYSTEM

Background

At book check out (Charge) the book data check card, the borrower's Library Card, and a serial number Transaction Card with the due date are photographed. The Transaction Card (T-card) goes out with the book and upon the book's return (Discharge) the T-card is removed and processed for the overdue data. At the end of the loan period, missing T-card numbers identify overdue books.

The present system uses reusable Key-sort cards which are manually sorted and refilled to determine the missing T-card numbers. For approximately the same material costs and one-fifth of the labor costs, a system of disposable T-cards and manual cross-off of returned T-card numbers could accomplish the same function. The cross-off system, however, does allow a much higher amount of errors. The system operation would be as follows:

The Transaction Card

The disposable transaction cards would be purchased at regular intervals in pre-numbered blocks as necessary. Prior to use, the cards would be stored in the drawers presently used for the Key-sort cards. At the beginning of each day's operations the expected use quantity of the appropriate serial numbers would be hand stamped with the due date and placed at the photocharging machines. Except for leftover re-stamped cards from the prior day the disposable T-cards would have just one due date stamped on them and would thus be neater and more easily read by the borrower. The cards could be color-coded for loan period.

The Discharging Process

The discharge process at the Circulation Desk would not change. T-cards could be removed from returned books, checked for due date, and slotted as at present. Where fines are due and not paid, the amount of the fine would be calculated and written in large letters on the T-card itself. This fine-due T-card would be forwarded to the Overdue Clerk as at present for processing.

Overdue Determination

Several times a day the returned T-cards would be removed from under the slots, arranged right-side up and separated into 28 day, 14 day and 7 day groups for each photocharging machine. The cards would not be sorted in numerical order. In small batches the returned T-card numbers would be manually crossed off of large pre-printed cross-off sheets. Extreme care would have to be taken at this step to ensure accuracy. After cross-off, the T-cards would be discarded.

The cross-off sheets are 12" x 15" heavy card stock with numbers 1 through 1000 printed in columns. The sheets would be in different colors corresponding to the colors of the T-cards for the different loan periods. The purchased sheets would be prepared for use each day by marking the charge block due dates and the first digits of the serial number at the top of the card. One or two sheets for each number series would be used on any given day. They would be filed by due date.

At due date plus 14 days all of the numbers on a due-date's cross-off sheet which have not been crossed off would be listed by hand in the overdue-list notebook (Black Book) for 7 day, 14 day and 28 day loan period series. From this point on the process would be the same as used for the present system.

CIRCULATION STUDY

APPENDIX D

CIRCULATION DEPARTMENT PROCESS DESCRIPTION AND WORK FLOW

Introduction

The current process in the Circulation Department is described here as a background and framework for the suggested changes made in the main body of this report. The process is arbitrarily divided into book loan, overdue, and administrative areas for convenience in organizing the material. The Glendale Public Library Manual of Procedures covers much of the same material however, as it was prepared some years ago, it does not in all cases reflect current practice.

Book Loan Process

Daily preparation for book checkout. In advance of each day's operations the transaction cards must be prepared. For each photocharging machine make the following preparations:

1. Note the last T-card numbers used the prior day and enter the immediately succeeding numbers on the Overdue Clerk's desk calendar for 7, 14, and 28 day number series. These are the "start" numbers for each day's Charge Block.
2. Calculate the estimated Charge Block for that day. As a general rule for Mondays, Tuesdays, Saturdays, or after holidays use:

150	7 day cards
100	14 day cards
1000	28 day cards

For other days use:

100	7 day cards
80	14 day cards
800	28 day cards

On a slip of paper in orderly groups add these estimated requirements numbers to the day's Charge Block start number. The sum is the expected Charge Block end number.

3. Prepare the T-cards for the day. Collect the left over unused T-cards from under the photocharging machine and collect the balance of the estimated Charge Block's T-cards from the storage drawer. Prepare duplicate cards for any missing T-numbers if they have not been made yet. Set the due date hand stamps to the Date 7, 14, and 28 days hence respectively and test stamp the slip of paper used to calculate the Charge Block. Keep the slip in the card box clipped to the divider tab. The slips can then be checked if necessary to verify the preparation process. After the hand date stamps are prepared apply the due date to all of the T-cards collected and place them in the compartments under the proper photocharging machines. 28 day T-cards go the right, 7 day T-cards go in the center, and 14 day T-cards go to the left. Since all the 28 day cards will not fit in the ready access compartment the bulk of these cards await their turn in the card box.

4. Place the pre-prepared today's date paper square in the upper left corner of the photocharging machines view tray and secure with tape. This allows today's date to appear in the photograph of each transaction charged.

5. Note the quantity on the Childrens Books Counter, enter the quantity on the Overdue Clerk's desk calendar, and reset the Counter to zero.

6. Empty the "hold at desk" box of new borrower's cards, place them in mailing envelopes, and place in the outgoing mail basket.

7. Afix to the inside edge of the circulation desk by the discharging slots a sign with the calendar date eight days hence marked on it. This reminder directs that returned T-cards with this or an earlier date go in the overdue slots.

Book Charging (checkout). The checkout of books and other library material is a simple fast process.

7. If the patron wishes to renew the material check the viz file and if clear remove T-card and return book to patron for checkout.

Returned book flow. After borrowed materials have been discharged the flow is as follows:

1. If book has a paper clip and the letter "R" on book check place book to left of viz file on Reserve shelf.
2. If children's material place on children's truck.
3. If returned without a T-card deliver book to Overdue Clerk for entry in snag file.
4. If appropriate, place on shelves below counter marked as follows:

Circulating Magazines

Reference Magazines

Fiction Storage or Mend

Magazine Storage or Mend

Non-fiction Storage or Mend

Missing Book Checks or Price

Branch

5. Place the rest on the hold book truck for check against viz file.
6. Check book against viz file entries. If a card exists in the viz file for the book, place the card in the book and place the book on the Reference hold shelf to the left.
7. If clear and none of the above, presort into non-fiction, fiction, paperback, or cataloged science fiction and place on book trucks for return to stacks.

Reserve book processing. If a patron or one of the staff wishes to reserve a book the following process is followed:

1. Potential borrower completes a reserve postal (white card - patron, yellow card - staff) at Reader's Service Desk. Fifteen cents fee is to be paid at this time.
2. The Postal data is to be verified and corrected by a librarian and the card forwarded to the Reserve Clerk in the Circulation Department.
3. The Reserve Clerk will log the count of fiction and non-fiction postals received. Once per month this statistical data is forwarded to the Overdue Clerk for compilation with other data.
4. Separate the postals for material "on order" and file the reserve postals in "on order" drawer at Reserve Desk.
5. Check "continuing reserves" file and if material requested is there already add new request to the back of those waiting. Books on continuing reserve have a letter "R" written on the book check and have a paper clip attached.
6. If the request is neither on order or continuing reserve then make a shelf check in the stacks using the cards.
7. If not found, type book data on bottom edge of card in pica type and place in viz file.
8. Prepare P-slip with book data for Ring File. Use the Ring File to check the shelves daily for reserved books which may have slipped past the viz file and be in the stacks.
9. After six weeks, if not found, remove card from viz file and make a shelf check.
10. Destroy Ring File copy of card.
11. If card is marked "unpaid" file card in "dead reserves" file at Circulation Desk. Hold for one year.
12. If card is marked "paid" prepare sub-borrower card (47-273) and mail. This card notifies borrower that the material is apparently lost and asks if a substitute is desired or should the search continue through other libraries or the branches.

13. If negative or no response to sub-borrower card after one week file reserve card in "dead reserves" file.
14. If positive response to sub-borrow card check shelves once more and check the Shelf Card File in the Processing Department to see if any of the branches have the book in their collection.
15. If a branch has the item send an Inter Branch Search Request (86-969). The branch will post this card on their viz file for six weeks if they do not have the book on their shelves.
16. If a branch locates the item they are to send it to the Central Reserve Clerk.
17. If after the six weeks search the branch does not locate the book prepare a MCLS Green Form 15 and request the book through the MCLS system.
18. If MCLS fails to locate material and borrower still wants it initiate a request through ILS.
19. All new non-fiction is delivered to the Reserve Clerk after completing processing. The fiction librarian maintains a list of on order books which are reserved and delivers those books to the Reserve Clerk. The Reserve Clerk checks each non-fiction book against the on order reserve cards and pulls those on reserve. New books are placed on a display shelf in the Circulation Department for one day prior to going to reserve patrons or to the stacks so that the staff can review new acquisitions.
20. If at any step in this process the material is located mail the reserve postal to the patron with a pick-up-by date one week hence.
21. Prepare the reserved book by attaching a sticker with the patron's last name. Use black pen for paid cards and red ink for unpaid cards.
22. Place the reserved book under the Circulation Desk in alphabetical order of patron's name.

23. When patron comes in to pick up the book the fee is paid if not already paid and the book is charged in the normal fashion.

24. Once each month a list is prepared of "Books on Reserve" and "Books in Demand" (6 or more reserves) and forwarded to the overdue clerk for inclusion in the statistical data.

Metropolitan Cooperative Library System (MCLS). When a book is requested which is not in the collection the book may be borrowed from one of the other cities participating in the Metropolitan Cooperative Library System.

1. The request is initiated with a reserve postal first as for other reserve books. The postal is delivered to the MCLS Clerk by the Reserve Clerk.

2. The MCLS Clerk completes a green Form 15 MCLS Title Request and maintains a file of outstanding requests annotated with the search status.

3. At one of the two Glendale time periods the request is sent over the teletype machine to the member cities in the specified order, one at a time, until the book is located.

4. When the book is received the reserve postal is sent to the patron and the regular reserve procedure is followed except that the book check is removed and kept with the Form 15 by the MCLS Clerk until the book is returned.

5. After the book is returned by the borrower, the Form 15 is cleared from the active file and the book sent to its home library.

6. When MCLS requests are received from other member cities the MCLS clerk forwards the teletype page to the librarians who check the request against the Glendale

Collection. If in the collection the book is located, via the viz file if necessary, and forwarded to the requesting library.

Inter-Library Loan Service (ILS). When materials cannot be located within the Glendale system or the MCLS system they may be requested from the state system with the Inter-Library Loan Service.

1. The ILS Clerk prepares a ILS Form 12 from the reserve postal and forwards the request to the State Library via Pasadena. The local controls and processes are similar to the MCLS process.

Overdue Process

Overdue determination in the circulation control system is made by the use of serialized transaction cards. A photograph of the borrower's library card, the book check, and a transaction card is made with each book charging. As borrowed material is returned the transaction cards are accumulated. After the due date for a given series of transaction numbers the missing transaction cards identify the overdue material via the T-number and the photographic record.

Transaction card less than eight days overdue. Transaction cards accumulate in the drawer under the discharge slots. Cards less than eight days overdue are placed in the further slots at discharge. The rear section of the drawer that contains these cards is to be emptied several times a day, as necessary. The cards are to be sorted with the sorting needle into 100ths and filed in the storage drawer to await further processing.

• Preparation of Transaction Log (green book). Each morning the starting serial transaction number for 7, 14, and 28 day series for each photocharging machine is noted and recorded in the Overdue Clerk's desk calendar. From this data a Transaction Log for each photocharging machine is prepared as follows:

1. From the transaction entries in the Overdue Clerk's desk calendar prepare a line of data across the five columns of the log for each photocharging machine. In column one, at the left edge of the log, enter the date of the working day following the

last entry date. This will normally be the current date. This date is defined to be the due date plus 14 days (1st notice date) of the transaction card entries for that line of data.

2. In the right hand or fifth column enter the corresponding due date, i.e. the date in the left column minus two weeks.

3. The three columns in the middle are for the 28, 14, and 7 day transaction number charge block spans. For the 28 day column locate the date to look up in the Overdue Clerk's calendar by subtracting 28 days from the due date. As a check, note the due dates penciled at the top of the charge date calendar page. For that charge date calculate the span. The 28 day T-number on that calendar page is the start number. The finish T-number is the starting T-number of the following day less one T-number. Enter these start and finish numbers in the Transaction Log in the 28 day column as a hyphenated number, e.g. 67,190 - 67, 950. Determine the 14 and 7 day column entries in a similar fashion. If the calculated charge date turns out to be a holiday enter "holiday" in place of the T-numbers span. Similarly if the current date happens to follow a holiday there will be a double entry to make in the log.

Preparation of Overdue List (black book). The Overdue List is prepared to identify the transaction numbers representing overdue borrowed material for which overdue reminder postals are to be sent.

1. From the Transaction Log (green book) determine the beginning and ending transaction numbers of the block due for processing. Those due for processing will have the current date in the left hand column (due date plus 14 days). If prior days have not been processed, as indicated by a line marked through the data, process those first.

2. Pull the selected block of transaction cards from the storage file drawer. They will have been sorted only to the nearest 100th.

3. With the McBee sorting pin and joggle board, sort the transaction cards to the units level working from high order to low order digit position.
4. Locate all missing transaction numbers and insert a red flag card in place of each missing number.
5. Remove all duplicate cards so that a number appears only once in the series, erase the duplicate number and return these cards to blank stock.
6. On a fresh page of the Overdue List (black book) enter at the top of the page the due date (from right hand column of green book) and the charge block beginning and ending numbers (middle three columns of green book).
7. List under column headings of 28, 14, and 7 day respectively the transaction numbers missing (red flags) from the charge block.
8. After the overdue processing has taken place check each transaction number entry for one or more of the following:
 - a. Double line cross out - returned and fine paid.
 - b. Single line cross out - transcribed and postal prepared.
 - c. Blue dot - returned after transcription but before postal mailed.
 - d. Red dot - P-slips checked for completeness.

Transaction cards eight or more days overdue. Transaction cards accumulate in the drawer under the discharge slots. Cards eight or more days overdue are placed in the near (overdue) slot at discharge and drop into the front section of the drawer.

1. At regular intervals collect these overdue transaction cards and check the T-numbers against the entries in the Overdue List (black book).
2. For transaction cards with no fine due slip attached cross off the corresponding T-number in the Overdue List with a double line indicating that the book has been returned and the fine paid.
3. For transaction cards with a fine due slip attached enter the fine amount in the

Overdue List adjacent to the corresponding T-number but do not cross off the T-number. This entry indicates that the book has been returned but that a fine is due and has not been paid.

4. Using the overdue transaction cards edit the P-slip files. (See P-slip files).
5. Discard the attached fine due slips and refile the overdue transaction cards in the appropriate storage drawer replacing the red flag cards.

Recordak film replacement. When the red light on the Recordak photocharging machine begins flashing it is time to replace the exposed film roll with a fresh roll of film. At the first convenient opportunity:

1. Open the back of the Recordak and remove the camera box from the photocharging machine.
2. Open the camera box, remove the roll of exposed film, and place the film in its' own yellow film box.
3. Mark the exposed film in the yellow box, next to the already marked start numbers, with the last transaction card number used for 14, 7, and 28 day loans (top of the pile less one).
4. Put the exposed film yellow box in the special mail envelopes and place in the mail basket.
5. Remove a fresh roll of film from its' yellow box, install the film in the camera box and assemble the Recordak for operation. Make one test exposure.
6. On the empty fresh film yellow box mark the "start" transaction card numbers (top of pile numbers) and the date.
7. After the film returns developed, the Overdue Clerk is to assign a Film Roll number from the Film Log, mark the film box with the number and place the film box in the Film Reader's desk.
8. The Overdue Clerk also enters in the Film Log the Film Number and the start and stop transaction numbers.

Recordak film transcription. When the transaction number processing indicates that an item is overdue the photocharging machine film is the source of the borrower and book data corresponding to the overdue transaction number.

1. From the Overdue List (black book) on the earliest un-transcribed page note the transaction numbers for 14, 7, and 28 day loans.

2. From the Film Reader's desk select the film box or boxes containing these transaction numbers.

3. With the film reading machine scan the film and locate the earliest transaction number from that page of the Overdue List.

4. Transcribe the borrower and book data for the overdue transaction number. Type a Reminder Postal card and two carbon copies on blank slips of paper (P-slips).

Include the following data from the film:

- a. Transaction number including loan period.
- b. Due Date.
- c. Current date.
- d. Book call number.
- e. Volume number.
- f. Book author.
- g. Book title.
- h. Borrower's name, address and telephone number.
- i. Book price.

(The book price and the telephone number are to be shown
on the P-slips only and not the postal)

Multiple books from the same borrower are to go on one card. As each number is completed cross out the number in the Overdue List with a single line through it.

5. Continue transcribing from the film for the balance of the list. Deliver the

completed postals and P-slips to the Overdue Clerk.

6. After reading the film replace the film box in the desk drawer until the drawer is full, then relocate the older films to T-card drawer used for long term film storage. Keep the film for four years and discard.

First overdue notices. The postal cards typed from the film transcription are the first overdue notices.

1. Check each overdue postal against the Snag File. If the book is listed there, remove the snag card and clear the transaction number by marking a blue dot by the number in the Overdue List. Discard the associated postal. Calculate the overdue fine if any and the charge for missing T-card and prepare a fine card (See Fine Card).
2. Check against the Overdue List to see if the book might have been returned (double cross out) during the time of film transcribing. If the material has been returned, mark a blue dot by the Overdue List entry and discard the postal. If not returned, check the completeness of the data on the P-slip and mark a red dot by the transaction number in the Overdue List.
3. Count the postals and enter with the date in the statistical data.
4. Set out the postals for franking and mailing.

P-slip files. The two carbon copies of the first overdue reminder postal are the operational files and records of the overdue process. These copies on plain 4" x 6" slips of paper are called P-slips and are maintained in desk top file boxes.

1. File the second P-slip copy in the Patron File by borrower's last name.
2. File the first P-slip copy in the Numerical File by transaction number within loan period for each of the following process steps as appropriate:

- a. Postals
- b. Reminder
- c. Bills
- d. Pickup

e. Says returned

f. Reports lost

g. Paid

3. As overdue T-cards come in edit and update the P-slip files. If fines are paid discard both of the P-slips. If fines are not paid, prepare a fine card. If reported returned or lost, note the fact on P-slips (See Books Reported Lost or Returned).

Note the action date of all activity on the Numerical File P-slip.

4. As process stages are completed (action date plus two weeks) move the P-slips still remaining in the Numerical File ahead to the next state. With each mailing in the process check against the Overdue List.

Books reported lost or claimed returned. Loaned material in these categories requires special handling.

1. When a borrower reports that a book has been returned or has been lost locate the transaction number from the borrower's name in the Patron P-slip File.

2. In the Numerical P-slip file mark the P-slip with the date and "reported lost" or "claimed returned" as appropriate. File the P-slip in the corresponding process step. The fine accumulation stops as of the date of reporting.

3. Search the snag file to see if the material might have come in without a T-card.

4. Search the shelves to see if the material had returned to the stacks.

5. Search the T-card drawer to see if the transaction card has returned.

6. Prepare a reserve card and place on the viz file for six weeks.

7. If the material is located, note the fact on the Numerical File P-slip and prepare a fine card.

8. If the material cannot be found after six weeks prepare a bill letter and mail.

9. If material is a claimed return item and borrower still claims returned, clear the record and drop the case.

10. If after six months the material still has not been located, process the item for off shelf. (See Off Shelf).

Second overdue notice. (Reminder). Four weeks after the overdue date if the borrowed material still has not returned:

1. Search the snag files.
2. Check the T-card drawer.
3. Search the shelves.
4. Prepare second notice letter and mail.
5. Note the 2nd notice date on the Numerical File P-slip and file the P-slip in the Reminder process section of the file.

Third overdue notice and bill. Six weeks after the overdue date, if the borrowed material still has not returned, prepare the bill letter with the price of the book. Follow the same checking and recording process as for the second notice. The P-slips for paid books are dated and filed in the Paid section of the Numerical File until six months after due date and then processed for off shelf (See Off Shelf).

Pickup service. Eight weeks after the overdue date if the material still has not returned:

1. Prepare a pickup data card using the 3 x 5 fine card.
2. Once each week plan a logical routing for the pickup of all items or groups of items over the value of approximately a dollar is prepared.
3. Using the pickup cards and following the pre-planned route the Library Messenger will on the following Saturday, visit the listed patrons and collect books, bills, and fines as appropriate.
4. Mark the P-slips with the pickup date and edit the files to reflect the results.
5. If the material is still not returned the P-slip is held in the Pickup section of the Numeric File until six months after due date at which time it is processed for off shelf. (See Off Shelf).

Fine cards and fine letters (overdue or damaged). If at any stage in the overdue process, material is returned damaged or eight or more days overdue without the fine having been paid, prepare a fine card:

1. From the P-slip data and the fine amount noted in the Overdue List prepare a 3 x 5 fine card.
2. Note the fact and the date on the P-slip.
3. File the fine card in the Delinquent file by patron's last name. If several fine cards exist for an individual band them together.
4. If the sum of the fines recorded on fine cards against an individual borrower amounts to one dollar or more, prepare a fine letter and mail. Note the fine letter date on the P-slip.
5. As fines are paid, transfer the fine cards from the Delinquent file to the Fines Paid file at the Circulation Desk and discard both the Numerical and Patron P-slips. From time to time clear the Fine Paid file of items over one year old.

Off shelf process. When all the overdue process has been to not avail and the borrowed item is still missing six months after the due date, the item is processed to remove it from the shelves and catalog.

1. Six months after the due date remove the P-slips from the Patron File and from the Paid, Reports Lost, Says Returned, and Pickup sections of the Numerical File.
2. From the P-slip data prepare a Lost Book Form and forward to the fiction or non-fiction librarians. In turn the librarians will forward the forms to the Processing section.
3. File the P-slips in the Numerical Off Shelf and Alphabetical Off Shelf file for four years. This file is used for the clearing of delinquency records and reinstatement of books found after a long period.